



## Porous Cordierite Refractory

### Description:

Cordierite Refractory is mainly a structural ceramic, often used for kiln furniture due to its extremely good thermal shock.

### Composition:

Al <sub>2</sub> O <sub>3</sub> :	35 %	MgO and Silica:	13 % and 50 %
Binders:	Propriety	Additives:	Propriety

### Specifications:

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Colour	Yellowish Ivory	
Compressive (Crushing) Strength	165	MPa
Density	2.20	g/cm <sup>3</sup>
Hardness	50	R45N
Dielectric Constant (Relative Permittivity)	-	N/A
Dielectric Strength (Breakdown Potential)	-	kV/mm
Elastic (Young's, Tensile) Modulus	103	GPa
Electrical Resistivity Order of Magnitude	1x10 <sup>14</sup>	Ω-m
Flexural Strength	66	MPa
Fracture Toughness	-	MPa
Poisson's Ratio	0.31	N/A
Specific Heat Capacity	-	J/kg-K
Tensile Strength Ultimate (UTS)	19	MPa
Thermal Conductivity	3 W/m-K	W/m-K
Thermal Expansion	4.2	µm/m-K

### Features:

- Superior thermal shock resistance
- Low thermal expansion
- Thermal stability
- Good electrical resistivity
- Immune to furnace all atmospheres

### Applications:

- Crucibles
- Bushings
- Furnace Boards
- Slabs
- Short tubes

### Production Capabilities:

- Isostatic and dry pressing, green machining
- Various shapes and sizes as per requirement
- Prototype, batch and volume production

These values represent typical properties of standard materials. Values should be used only for comparison and should not be used as a warranty.